CI Sul

b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:20.

REMARKS

Claims 1-19 and 22-45 were pending in the application. Claims 1-19 and 22-26 have been cancelled, without prejudice, and new claims 46-49 have been added. Accordingly, after the amendments presented herein have been entered, claims 27-49 will remain pending. For the Examiner's convenience all of the pending claims are set forth herein in Appendix A.

Support for the newly added claims can be found throughout the specification and claims as originally filed. Specifically, support for new claims 46, 47, 48 and 49 can be found in claims 27, 28, 37 and 38 as originally filed, respectively. Further support for newly added claims 46-49 can be found at page 11, lines 10-24, and page 8, lines 35-38 of the specification.

No new matter has been added. Any cancellation of the claims should in no way be construed as an acquiescence to any of the Examiner's rejections and was done solely to expedite the prosecution of the application. Applicant reserves the right to pursue the claims as originally filed in this or a separate application(s).

Withdrawal From Consideration of Claims 28, 30, 32-36, 38, 40, and 42-45 As Being Directed to a Non-Elected Invention

The Examiner has withdrawn claims 28, 30, 38, 40, and claims 32-36 and 42-45 in so far as they depend from any of claims 28, 30, 38, and 40, as being directed toward an invention that is independent or distinct from the invention originally claimed.

Applicant traverses the withdrawal from consideration of these claims for the following reasons. The polypeptide that the Examiner believes is independent from the invention that was originally claimed (SEQ ID NO:20) is a *splice variant* of claimed polypeptide (SEQ ID NO:5). Both SEQ ID NO:20 and SEQ ID NO:5 are human capsaicin/vanilloid receptor polypeptides and share a high degree of sequence identity. The two polypeptides are identical with the exception of 164 residues that are deleted in the spice variant (see Figure 17 of the instant application for a

Serial Number: 09/587,111

Group Art Unit: 1646

sequence alignment) and share the same structural features. Accordingly, the two polypeptides share a common utility which is based upon shared structural and functional features and, thus, have a unity of invention. Moreover, a search of the full length polypeptide would by default also search the splice variant and, thus, no additional searches that would pose undue burden on the Examiner would be necessary. Therefore, SEQ ID NO:20 is not directed toward an invention that is distinct from the invention originally claimed, and Applicant respectfully requests that the claims directed toward SEQ ID NO:20 be considered and examined by the Examiner.

Rejection of Claims 31-36 and 41-45 Under 35 U.S. C. § 112, First Paragraph

The Examiner has rejected claims 31-36 and 41-45, under 35 U.S.C. § 112, first paragraph because, "the specification, while being enabling for the practice of a method of identifying a ligand which binds to a receptor protein comprising the amino acid sequence presented in SEQ ID NO:5 of the instant specification, does not reasonably provide enablement for the practice of a binding assay which employs a protein having anything less than the entire amino acid sequence presented in SEQ ID NO:5" (Emphasis added). The Examiner is further of the opinion that

[t]he instant specification specifically identifies notable structural features of a protein of the instant invention. It neither provides the identification of the expendable residues in SEQ ID NO:5 nor even a single working example of a functional protein lacking its entire native amino acid sequence.

Applicant traverses this rejection for the following reasons. As indicated in Applicant's previous reply, the teachings in Applicant's specification, and the knowledge generally available in the art at the time of filing would allow a skilled artisan to practice the claimed methods using only routine experimentation.

Contrary to the Examiner's assertions, Applicant has taught in the instant specification which regions of the VR-2 molecules are important for activity and, thus, which regions of the molecule would respond in a binding assay in a manner which is representative of the native protein. Specifically, as taught in the specification (at, for example, page 10, lines 1-35; page 66, lines 30-34; and page 67, lines 1-11), the VR-2 polypeptide contains ankyrin repeats, transmembrane domains, and at least one proline rich domain, all characteristic and necessary for the function of the Capsaicin/Vanilloid family of receptors. Based on these teachings in Applicant's specification, the skilled artisan would be equipped to use a fragment containing one or more of these functional

Group Art Unit: 1646

domains to identify compounds that bind to a domain and modulate an activity of the Capsaicin/Vanilloid receptor. Compounds identified in such a manner would be of practical value, e.g., they could be used as antagonists of a Capsaicin/Vanilloid receptor. For example, as taught in Applicant's specification a fragment of a VR-2 polypeptide containing the proline rich domain may be used by the skilled artisan to identify compounds capable of binding the proline rich domain and disrupting interactions with SH3 domain-containing proteins that act downstream of the VR-2 receptor in a pain signaling pathway. Such a compound would be expected to inhibit the function of the VR-2 polypeptide by disrupting the VR-2 signaling pathway.

Further, contrary to the Examiner's assertion, Applicant does disclose a working example of a fragment of SEQ ID NO:5. SEQ ID NO:20 is a splice variant of SEQ ID NO:5 that is identical in sequence to SEQ ID NO:5 with the exception of a 134 residue deletion from residue 529-663 (see the sequence alignment presented in Figure 17). Moreover, in Example 5 Applicant discloses specific fragments of SEQ ID NO:5 that were used to generate antibodies against human VR2 (see SEQ ID NOs:13, 14 and 15 at page 70 of the specification).

The Examiner further states that, "Applicant has cited a plurality of patent documents in traversal of this rejection. Applicant is advised that none of the patents cited were available at the time the instant application was filed." Applicant respectfully submits that, although the patents submitted were not *issued* at the time Applicant filed the instant application, the patents were submitted prior to Applicant's filing date and, thus, *prove that the methods disclosed therein were common and well known to those of ordinary skill in the art at the time of Applicant's filing.*

With respect to the newly added claims 46-49 which are directed to methods of identifying compounds that modulate polypeptides that are 95% identical to the hVR2 molecules, Applicant would like to point the Examiner's attention to Example 14 Revised Interim Written Description Guidelines Training Materials. Example 14 provides that a claim directed to variants of a protein having SEQ ID NO:3 "that are at least 95% identical to SEQ ID NO:3 and catalyze the reaction of A→B" with an accompanying specification that discloses a single species falling within the claimed genus, satisfies the requirements of 35 U.S.C. §112, first paragraph for written description. The rationale behind the foregoing conclusion, as presented by the Written Description Guidelines, is that "[t]he single species disclosed is representative of the genus because all members have at least 95% structural identity with the reference compound and because of the presence of an assay which Applicant provided for identifying all of the at least 95% identical variants of SEQ ID NO:3 which are capable of the specified catalytic activity." The Guidelines also provide that "[t]he procedures

Serial Number: 09/587,111

- 6 -

for making variants of SEQ ID NO:3 are conventional in the art and an assay is described which will identify other proteins having the claimed catalytic activity. Moreover, procedures for making variants of SEQ ID NO:3 which have 95% identity to SEQ ID NO:3 and retain its activity are conventional in the art."

Similarly, in the present case, the claims are directed to methods which use isolated nucleic acid molecules encoding hVR-2 polypeptides comprising an amino acid sequence that is at least 95% identical to the amino acid sequence shown in SEQ ID NOs:5 and 20, wherein the polypeptide is capable of modulating membrane excitability. Furthermore, Applicant has disclosed in the instant specification assays for identifying all of the at least 95% identical variants of SEQ ID NO:5 and 20 which encode polypeptides capable of modulating membrane excitability (see, for example, the patch-clamp methods taught by the Applicant in Example 4). Modulation of membrane excitability is readily testable by one of skill in the art by the methods described in the instant specification and by methods well-known in the relevant art. Accordingly, it would require only routine experimentation on the part of one of skill in the art to mutate the VR-2 molecules of the invention and test them for the ability to modulate membrane excitability as described in the specification.

Based on the foregoing teachings in Applicant's specification and the knowledge generally available in the art at the time of filing, Applicant respectfully submits that the skilled artisan would be able to make and use the claimed invention using only routine experimentation. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the foregoing rejection.

Rejection of Claim 42 Under 35 U.S. C. § 112, First Paragraph

The Examiner has rejected claim 42 under 35 U.S.C. § 112, first paragraph because, "[i]t was well know in the art prior to the time of the instant application that the yeast two-hybrid system can only employ small soluble proteins as shown in Figure 1 of the Chien *et al.* publication." The Examiner is further of the opinion that

[o]ne of ordinary skill in the art of molecular biology would immediately recognize that a yeast two-hybrid system which employed all of the amino acid sequence of SEQ ID NO:5 would be inoperative because the presence of the six transmembrane domains within that sequence (Figure 1B of Julius *et al.* Pat. No. 6,335,180). In so far as this claim encompasses a system employing only a soluble portion of the amino acid sequence of SEQ ID NO:5, the instant specification does not disclose a practical utility which is to be realized from the identification of a protein which bind[s] to a portion of that amino acid sequence.

Applicant traverses the forgoing rejection for the following reasons. Contrary to the Examiner's assertions, employing fragments of SEQ ID NO:5 in yeast two hybrid assays would be useful in finding modulators that disrupt pain signaling mechanisms. One of ordinary skill in the art would immediately recognize the potential applications of using fragments of a transmembrane protein in screening assays to identify compounds that are capable of binding to an insoluble transmembrane protein. Identification of a compound that binds to a fragment of a transmembrane protein is useful in the modulation of the activity of the protein. For example, a particularly useful application would be the identification of a compound that is capable of binding to an extracellular region of the transmembrane protein and either blocks natural ligand binding, or itself modulates hVR-2 activity in some other manner. Applicant's specification discloses the presence of proline rich domains in hVR-2 polypeptides. Proline rich domains are known to interact with SH3 domains in proteins that act upstream or downstream of hVR-2 in a pain signaling pathway and, thus, the proline rich domains of VR-2 are useful in screening for modulators that disrupt the pain signaling mechanism. Moreover, Applicant's specification provides a hydrophobicity plot for hVR-2 that an ordinary skilled artisan would be able to use to identify those regions of the protein that are on the cell surface. The use of these portions of the protein would allow for the identification of compounds that themselves modulate the activity of the receptor, or through steric effects, abolish the ability of the receptor to bind to other ligands.

Based on the foregoing teachings in Applicant's specification, and the knowledge generally available to one skilled in the art at the time of filing, it is obvious that the ordinary skilled artisan would realize the applications of using fragments of hVR-2 in a two-hybrid system, and would further be able to make and use the claimed invention using only routine experimentation.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the foregoing rejection.

Rejection of Claims 27, 29, 31-34, 36, 37, 39 41, and 43-45 under 35 U.S.C. 102 (e)

The Examiner has rejected claims 27, 29, 31-34, 36, 37, 39 41, and 43-45, under 35 U.S.C. § 102(e) as being anticipated by Julius *et al.* (United States Patent No. 6,335,180 B1). In particular, the Examiner is of the opinion that "[t]he amino acid sequence presented in SEQ ID

Serial Number: 09/587,111

Group Art Unit: 1646

NO:5 of the instant application is identical to the amino acid sequence presented in SEQ ID NO:36 of the Julius *et al.* patent."

Applicant respectfully traverses the aforementioned rejection for the following reasons. As evidenced by copies of U.S. Application Serial No: 08/915,461, Provisional Application Serial No: 60/072,151and PCT application Serial No. PCT/US98/17466 (submitted herewith as Appendices B, C, and D, respectively) to which Julius *et al.* claim priority, *SEQ ID NO:36 is not disclosed in any of these applications*. Accordingly, the 35 U.S.C. § 102(e) date that Julius *et al.* are entitled to with respect to SEQ ID NO:36, is *January 22, 1999*, the filing date of the Julius *et al.* patent (6,335,180 B1). Moreover, Julius *et al.* disclose *but do not claim* the amino acid sequence set forth in SEQ ID NO:36.

Applicant submits herewith a declaration under 37 CFR §1.131 which indicates that Applicant has completed the invention as described and claimed in the above-referenced patent application in this country *prior to January 22, 1999*. Accordingly, Applicant respectfully submits that the invention disclosed in the present patent application was reduced to practice by the inventor prior to the effective date of the Julius *et al.* reference. As such, the Julius *et al.* reference is not available as prior art against the present invention under 35 U.S.C. 102§(e), and Applicant respectfully requests that the Examiner reconsider and withdraw this rejection.

Rejection of Claim 35 under 35 U.S.C. 103 (a)

The Examiner has rejected claim 35 under 35 U.S.C. § 103(a) as being unpatentable over Julius *et al.* Specifically, the Examiner believes

[b]ecause the Julius *et al.* patent disclosed the fact that the receptor described therein was naturally expressed in neuronal tissue an artisan would have found it *prima facie* obvious to have expressed that protein recombinantly in a neuronal cell line to obtain a more authentic response by that receptor to a test compound.

Applicant respectfully submits that, in view of the declaration under 37 CFR §1.131 submitted herewith, the aforementioned rejection is rendered moot. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection.

Serial Number: 09/587,111 - 9 - Group Art Unit: 1646

Rejection of Claim 42 under 35 U.S.C. 103 (a)

The Examiner has rejected claim 42 under 35 U.S.C. § 103(a) as being unpatentable over Julius *et al.* in view of Chien *et al.* Specifically, the Examiner believes that

[t]o have incorporated portions of the capsaicin receptor of Julius *et al.* into the yeast two hybrid system of Chien *et al.* to identify proteins with might interact therewith would have been *prima facie* obvious to one of ordinary skill in the art.

Applicant respectfully submits that, in view of the declaration under 37 CFR §1.131 submitted herewith, the Julius *et al.* patent is not available as prior art against the instant application. The Chien *et al.* publication, by itself, is not sufficient to render claim 42 obvious to one of ordinary skill in the art. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection.

SUMMARY

If a telephone conversation with Applicant's attorney would expedite the prosecution of the above-identified application, the Examiner is urged to call the undersigned at (617) 227-7400.

Respectfully submitted,

LAHIVE & COCKFIELD, LLP

Maria Laccotripe Zacharakis, Ph.D.

Attorney for Applicant

Limited Recognition Under 37 CFR §10.9(b)

28 State Street Boston, MA 02109

Telephone: (617) 227-7400 Facsimile: (617) 742-4214

Dated: September 25, 2002

Serial Number: 09/587,111 - 10 - Group Art Unit: 1646

Appendix A

27. A method for identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5, the method comprising:

- a) contacting a cell expressing the polypeptide with a test compound under conditions suitable for binding; and
- b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5.
- 28. A method for identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:20, the method comprising:
 - a) contacting a cell expressing the polypeptide with a test compound under conditions suitable for binding; and
 - b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:20.
- 29. A method for identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:5, the method comprising:
 - a) contacting a cell expressing the polypeptide with a test compound under conditions suitable for binding; and
 - b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:5.
- 30. A method for identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:20, the method comprising:
 - a) contacting a cell expressing the polypeptide with a test compound under conditions suitable for binding; and

Serial Number: 09/587,111 - 11 - Group Art Unit: 1646

b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:20.

- 31. A method for identifying a compound which binds to a polypeptide comprising at least 15 contiguous amino acids of SEQ ID NO:5, the method comprising:
 - a) contacting a cell expressing the polypeptide with a test compound under conditions suitable binding; and
 - b) determining whether the test compound binds to said polypeptide, thereby identifying a compound which binds to a polypeptide comprising at least 15 contiguous amino acids of SEQ ID NO:5.
- 32. The method of any one of claims 27-31, wherein binding of the test compound to the polypeptide is detected by the use of an assay for a hVR-2 activity.
- 33. The method of claim 32, wherein said hVR-2 activity is modulation of membrane depolarization.
- 34. The method of claim 32, wherein said hVR-2 activity is modulation of intracellular calcium levels.
- 35. The method of any one of claims 27-31, wherein said cell expressing said polypeptide is a neuronal cell.
- 36. The method of any one of claims 27-31, wherein said compound modulates the activity of said polypeptide.
- 37. A method for identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5, the method comprising:
 - a) contacting a sample comprising the polypeptide with a test compound under conditions suitable for binding; and

Serial Number: 09/587,111 - 12 - Group Art Unit: 1646

b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5.

- 38. A method for identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:20, the method comprising:
 - a) contacting a sample comprising the polypeptide with a test compound under conditions suitable for binding; and
 - b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:20.
- 39. A method for identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:5, the method comprising:
 - a) contacting a sample comprising the polypeptide with a test compound under conditions suitable for binding; and
 - b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:5.
- 40. A method for identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:20, the method comprising:
 - a) contacting a sample comprising the polypeptide with a test compound under conditions suitable for binding; and
 - b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:20.
- 41. A method for identifying a compound which binds to a polypeptide comprising at least 15 contiguous amino acids of SEQ ID NO:5, the method comprising:
 - a) contacting a sample comprising the polypeptide with a test compound under conditions suitable for binding; and

Serial Number: 09/587,111

Group Art Unit: 1646

b) determining whether the test compound binds to said polypeptide, thereby identifying a compound which binds to a polypeptide comprising at least 15 contiguous amino acids of SEQ ID NO:5.

42. The method of any one of claims 27-31 or 37-41, wherein binding of said test compound to said polypeptide is detected by the use of a yeast two-hybrid assay.

- 13 -

- 43. The method of any one of claims 37-41, wherein binding of said test compound to said polypeptide is detected by the use of a direct binding assay.
- 44. The method of any one of claims 37-41, wherein binding of said test compound to said polypeptide is detected by the use of a competition binding assay.
- 45. The method of any one of claims 37-41, wherein said test compound modulates the activity of said polypeptide.
- 46. A method for identifying a compound which binds to a polypeptide that is 95% identical to the amino acid sequence of SEQ ID NO:5 and is capable of modulating membrane excitability in a cell, the method comprising:
 - a) contacting a cell expressing the polypeptide with a test compound under conditions suitable for binding; and
 - b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5.
- 47. A method for identifying a compound which binds to a polypeptide that is 95% identical to the amino acid sequence of SEQ ID NO:20 and is capable of modulating membrane excitability in a cell, the method comprising:
 - a) contacting a cell expressing the polypeptide with a test compound under conditions suitable for binding; and

Serial Number: 09/587,111 - 14 - Group Art Unit: 1646

b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:20.

- 48. A method for identifying a compound which binds to a polypeptide that is 95% identical to the amino acid sequence of SEQ ID NO:5 and is capable of modulating membrane excitability in a cell, the method comprising:
 - a) contacting the polypeptide with a test compound under conditions suitable for binding; and
 - b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5.
- 49. A method for identifying a compound which binds to a polypeptide that is 95% identical to the amino acid sequence of SEQ ID NO:20 and is capable of modulating membrane excitability in a cell, the method comprising:
 - a) contacting the polypeptide with a test compound under conditions suitable for binding; and
 - b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:20.

21e11a Sequencher™ "21e11racefinal"

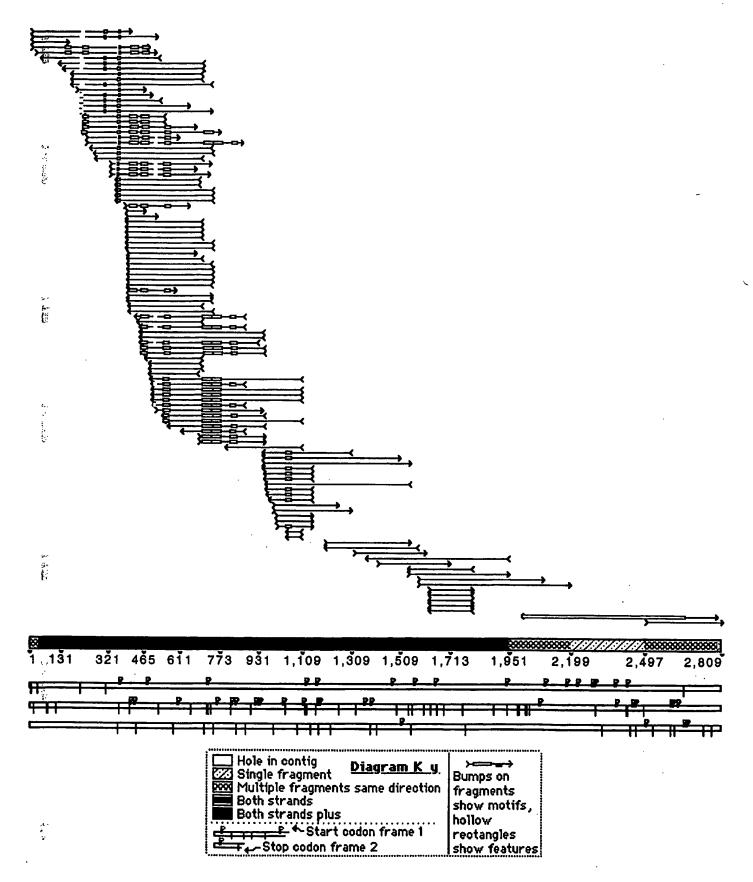


Exhibit B

21e11a Sequencher** "21e11racefinal"

```
flbxc21e11z2
             #1 GGCTAGCCTG TCCTGACAGG GGAGAGTTAA GCTCCCGTTC TCCACCGTGC CGGCTGGCCA GGTGGGCTGA GGGTGACCGA GAGACCAGAA
🎜 flhxc2le11z1 🛮 #1 GGCTAGCCTG TCCTGACAGG GGAGAGTTAA GCTCCCGTTC TCCACCGTGC CGGCTGGCCA GGTGGGCTGA GGGTGACCGA GAGACCAGAA
√ Gendank N24... >#1> GCTAGCCTG TCCTGACAGG GGAGAGTTAA GCTCCCGT:C TCCACCGTGC CGGCTGNC:A GGTGGGCTGA GGGTGACCGA GAGACCAGAA
√2 Gembank N28... >#1>
                    GCTAGCCTG TCCTGACAGG G:AGAGTTAA GCTCCCGTTC TCCACCGTGC CGGCTGGC:A GGTGGGCTGA GGGTGACCGN GAGACCAGAA
4 Genbank №29... >#1>
                                 GACAGG GGAGAGTTAA GCTCCCGTTC TCCACCGTGC CGGCTGNC:A GGTGGGCTGA GGGTGACCGA GAGACCAGAA
### f1hXc21e11i2 >#1>
                                                             TCCACCGTGC CGGCTGGCCA GGTGGNCTGA GGGTGACCGA NAGACCAGAA
               #1 GGCTAGCCTG TCCTGACAGG GGAGAGTTAA GCTCCCGTTC TCCACCGTGC CGGCTGGCCA GGTGGGCTGA GGGTGACCGA GAGACCAGAA
                    G. PV LTG BS. APVL HRAGWP GGLR VTE RPE

☐ £1hxc21e11z2 #91 CCTGCTTGCT GGAGCTTAGT GCTCAGAGCT GGGGAGGGAG GTTCCGCCGC TCCTCTGCTG TCAGCGCCGG CAGCCCCTCC CGGCTTCACT

### flbxc2lellz1 #91 CCTGCTTGCT GGAGCTTAGT GCTCAGAGCT GGGGAGGGAG GTTCCGCCGC TCCTCTGCTG TCAGCGCCGG CAGCCCCTCC CGGCTTCACT
🛱 Genbank N244... #90 CCTGCTTGCT GGAGCTTAGT GCTCAGAGCT GGGGANGGAG GTTCCGCCGC TCCTCTGNTG TCA
√ Genbank N280... #90 CCTGCTTGCT GGAGCTTAGT GCTCAGAGCT GGGGAGGGAG GTTCCGCCGC TCCTCTGCTG TCA:CGCCGG CAGCCCCTCC CGGCTTCACT
Genbank N291... #77
                  CCTGCTTGCT GGAGCTTAGT GCTCAGAGCT GGGGAGGGAG GTTCCGCCGC TCCTCTGCTG TCA:CGCCGG CAGCCCCTCC CGGCTTCACT
flhXc21e11i2 #51
                  CNTGCTTGCT GAAGTTTAGT GTTCAGAGCT GGGAAGGGAG GTTCCGCNGC TCNTCTGCTG TCAGCGCCGG CAGCCCCTCC NGGCTTCACT
flhxc21e11g2 >#1>
                                          CAAAGCT GGGAAGGAAG GTTCCGCNGC TCMTCTGCTG TCAGCGCCGG CAGCCCCTCC NGGCTTCACT
flhxc21e11g1 >#1>
                                                              TTCCGCCGN TCNTCTGTTG TCAGCGC:GG CAGCCCNTCC NGGCTTCACT
# flhx21e11r19... >#1>
                                                                                              AGCCCCTCC CGGCTTCANT
#11hX21e11r19... >#1>
                                                                                              AGCCCCTCC CGGCTTCACT
#1 f1hxc21e11h1 >#1>
                                                                                             AGCCCNTCC NGGCTTCANT
                     #91 CCTGCTTGCT GGAGCTTAGT GCTCAGAGCT GGGGAGGGAG GTTCCGCCGC TCCTCTGCTG TCAGCGCCGG CAGCCCCTCC CGGCTTCACT
                    PACW SLV LRAGEGG SAA PLL
                                                                                  S A P A A P P G F T
flhxc21e11z2 #181 TCCTCCCGCA GCCCCTGCTA CTGAGAAGC
                                                        CCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
£1hxc21e11z1 #181 TCCTCCCGCA GCCCCTGCTA CTGAGAAGC
                                                         CCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
🗗 Gembank N28... #180 TCCTCCCGCA GCCCCTGCTA CTGAGAAGCT CCGGGATCCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGN GNGGCTCCAG TCAGGCCAAC
🗲 Gembank N29... #167 TCCTCCCGCA GCCCCTGCTA CTGAGAAGCT CCGGGATCCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
flhxc21e11i2 #141 TCCTCCCGCA GCCCNTGCTA CTGAGAAGC
                                                         CCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
#68 #68
                  TCCTCCCGCA GCCCCTGCTA TTGAGAAGC
                                                         CCC AGCAGCCGCC ACGCCTTGG: CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
flhXc2lel1g1 #50
                  TCCTCCCGCA GCCCNTGCTA TTGAGAAGC
                                                         CCC AGCAGCCGCC ACGCCNTGGC CTCAG:CTG: GGGGCTCCAG TCAGGCCAAC
f1hx21e11r19g1 #20
                  TCCTCCCGCA GCCCCTGCTA CTGAGAAGCT CCGGGATCCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
🗗 flax21e11r19g2 #20 | TCCTCCCGCA GCCCTGCTA CTGAGAAGCT CCGGGATCCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
flhxc21e11h1 #20 TCCTCCNGCA GCCCTTGNTA CTGAGAAGN
                                                        :CC AACAGCCGCC ACGCCNCGG: CTCAG:CTG: GGGGNTCCAG TCAGGCCAAC
flhx21e11r21... >#1>
                      CGCGCA GCCCTGCTA CTGAGAAGCT CCGGGATCCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
flhXd21e11b1 >#1>
                                        TGANAAGC
                                                       CCC AGCAGCCNNC ACTCCNTGGC CNNAACCTGC GGGGCTCCAN MNMMNCCAAC
flhxc21e11i1 >#1>
                                        TGAGAAGC.
                                                         CCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
flhxc21e11b1 >#1>
                                        TGAGAAGC
                                                         CCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
flhxc21e11b2 >#1>
                                         TGAGAAGC
                                                         CCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
ithsa103e2b2 >#1>
                                                C ACGCGTCCGC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGT GGGGCTCCAG TCAGGCCAAC
ithsa103e2b1 >#1>
                                                C ACGCGTCCGC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGT GGGGCTCCAG TCAGGCCAAC
#1> jthsa103e2t2 >#1>
                                                C ACGCGTCCGC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGT GGGGCTCCAG TCAGGCCAAC
| jthsa103e2t1 >#1>
                                                  ACCCGTCCGC ACCACCCGCC ACCCCCTGCC CTCACCCTGT GGGGCTCCAG TCAGGCCAAC
Genbank AA4... >#1>
                                                              GCAGCCGC: ACGCCCTGGC CTCAGCCTGC GTGGCTCCAG TCAGGCCAAC
ithsa103e02t... >#1>
                                                              GCAGCCGCC ACGCCCTGGC CTCAGCCTGT GGGGCTCCAG TCAGGCCAAC
i f1hx21e11r21... >#1>
                                                                             TGGC CTCAGCNTGC GGGGCTCCAG TCAGGCCAAC
flhx21e11r21... >#1>
                                                                                                 TCCAG TCAGGCCAAC
1 flhx21e11r21... >#1>
                                                                                                    AG TCAGGCCAAC
             #181 TCCTCCCGCA GCCCTGCTA CTGAGAAGCT CCGGGATCCC AGCAGCCGCC ACGCCCTGGC CTCAGCCTGC GGGGCTCCAG TCAGGCCAAC
                   S S R S P C Y . E A P G S Q Q P P R P G L S L R G S S Q A N
```

+++ + ++ +++++ + + +

```
19 flbxc21e1122 #271 ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TNCATNTGCA CAAANGTCCT GGCTGGACCG AGCAGCCTNC TNCT:CTAGG
🎜 flhxc21e11z1 #271 accgacgcgc agctgggagg aaaacangac ccttgacatc tncatctgca canangtcct ggctggaccg agcagcctnc tnct:ctagg
Gembank N28... #270 ACCGACGCGC A:NTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACGA NGCAGCCTCC TCCTCC G
d Genbank N29_ #257 ACCGACGCGC A:NTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCC G
### flbxc21e1112 #231 ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
flhxc21e11g2 #158
                    ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
A fibxc21e11g1 #140 ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
#110 ACCGACGCG AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
fibx21e11r19...#i10 ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
### flhxc21e1lh1 #110 ACCNACG:GC A:NTTGGAGN AAGACAGGAC CCTTGACATC TCCATCTGCA CANAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
PIDX21e11r21v2 #87 ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTNCTAGG
₽ £1bxd21e11b1 #70 accgacgcgc agttgggngg angacaggac ccttgacatc tccatctgca cagaggtcct ggctggaccg agcagnctnc tnctcctagg
flhXc21e11i1 #70
                    ACCGACGCGC AGNTGGGAGG AANACAGGAC CCTTGACATC TCCATCTGCN CANAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
flhxc21e11b1 #70
                    ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
flhxc21e11b2 #70
                    ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
jthsa103e2b2 #62
                    ACCGACGCG AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCC G
jthsa103e2b1 #62
                   ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCC
jthsa103e2t2 #62
                   ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCC
jthsa103e2t1 #61
                   ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCC
Genbank AA45... #50
                   ACCGACGCGC A:CTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGG:CCG AGCAGCCTCC TCCTCC
4 jthsa103e02t1... #50 ACCGACGCGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCC
A fibx21e11r21e2 #35 ACCGACGNGC AGCT:GGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
# flbx2le11x21a1 #16 ACCGACGCGC AGCT:GGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
🛍 flhx2le11r21g2 #13 accgacongc agntoggagg aagacaggac cettgaente tecatetgea cagaggteet ggntggaeeg agcageetee tecteetagg
√ Genbank H20.. >#1>
                                                                          GAGAGGTCCT GGCTGGACCA NGCAGCCTCC TCCTCC G
4 Genbank H50... >#1>
                                                                           AGAGGTCCT GGCTGGACNC :GCAGCCTCC TCCTCC
                                                                                                                    G
4 Genbank H49... >#1>
                                                                           AGAGGTCCT GGCTGGACAT :GCAGCCTCC TCCTCC
f1hx21e11r20... >#1>
                                                                                              G AGCAGCCTCC TCCTCCTAGG
#1hx21e11r20... >#1>
                                                                                              G AGCAGCCTCC TCCTCCTAGG
flhx21e11r22... >#1>
                                                                                              G AGCAGCCTCC TCCTCCTAGG
f1hx21e11r22... >#1>
                                                                                              G AGCAGCCTCC TCCTCCTAGG
i2 f1hx21e11r20... >#1>
                                                                                              G AGCAGCCTCC TCCTCCTAGG
```

#271 ACCGACGGC AGCTGGGAGG AAGACAGGAC CCTTGACATC TCCATCTGCA CAGAGGTCCT GGCTGGACCG AGCAGCCTCC TCCTCCTAGG
T D A Q L G G R Q D P . H L H L H R G P G W T E Q P P P P R

```
#361 ATGACCTCAC CCTNCAGCTC TNCAGTTTTT AGGTTGGAGA CANTA
  🏿 f1hxc21e11z1 #361 ATGACCTCAC CCTNCAACTC TTCAGTTTTT AAGNTGGAGA CATTATATGG AGGNCCAAAA NATGGCTCTN AGGCGGACAA ANGAAA:CTT
 Genbank M28... #360 ATGACCTCAA CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
  d dembank N29_ #347 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 finxc21e1112 #321 atgacctcac cctccagctc tccagttttc aggttggaga cattagatgg aggccaagaa gatggctctg aggcggacag aggaaagctg
 #248 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 A flexc21e11g1 #230 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 🗐 fibx21e11r19... #200 atgacctcac cctccagctc tccagttttc aggttggaga cattagatgg aggccaagaa gatggctctg aggcggacag aggaaagctg
 🍎 flhx21e11r19.. #200 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 🎁 flhxc21e11h1 #200 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 P f1hx21e11r21... #177 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGAC:G AGGAAAGCTG
 🗐 flhxd21e11b1 #160 ATGACCTCAC CCTCCAGCTC TCCAGTTTTN AGGTTGGANA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 Pidxc21e1111 #160 atgacctcac cetecagete tecagitite aggitggaga cattagatgg aggecaagaa gatggetetg aggeggaeag aggaaagetg
 #160 #160
                     ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 flhXc21e11b2 #160
                     ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 ilithsa103e2b2 #152
                     ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 #152 #152
                     ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 jthsa103e2t2 #152
                     ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 #151 #151
                     ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
                     ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG A:G:CAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 🗗 jthsal03e02t... #140 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATNG AGGCCAAGAA AATGGCTCTG AGGCGGACAG AGGAAAGCTG
 🏿 f1bx21e11r21... #125 atgacctcac cctccagctc tccagttttc aggttggaga cattagatgg aggccaagaa gatggctctg aggcggacag aggaaagctg
 Pibx21e11r21... #106 atgacctcac cctccagctc tccagttttc aggttggaga cattagatgg aggccaagaa gatggctctg aggcggacag aggaaagctg
 🛍 flhx21e11r21... #103 atgacctcac cctccagctc tccagttttc aggttggaga cattagatgg aggccaagaa gatggctctg aggcggacag aggaaagctg
 Genbank H201... #41 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 Gembank H504... #40 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 Genbank H491... #40 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 🛍 flhx21e11r20g1 #22 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGGGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
A flhx21e11r20g2 #22 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGGGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
A FILX21e11r22a2 #22 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 # flbx21e11r22e1 #22 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
🛍 flhx21e11r20a2 #22 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGGGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 flhx2lel1rrl... >#1>
                                           CCCACGCGTC CGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 ### flbx21e11r18... >#1>
                                               GTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 flhx21e11r18... >#1>
                                               GTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 f1hx21e11r16... >#1>
                                               GTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 flhx21e11r18... >#1>
                                               GTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 flhx21e11r15... >#1>
                                               GTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
 flhx21e11r15... >#1>
                                               GTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
flhx21e11r20... >#1>
                                               GTTTTC AGGTTGGGGA CATTANATGG AGGCCAAAAA NATGGCTTTN AGGCGGACAN ANGAAANCTG
flhx21e11r18... >#1>
                                               GTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTTTG AGGCGGACAG AGGAAAGCTG
flhx21e11r17... >#1>
                                                   TC CGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
flhx21e11r17... >#1>
                                                   TC COGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
#2 f1hx21e11r17... >#1>
                                                   TC CGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
flhx21e11r15... >#1>
                                                   TC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
### flhx21e11r15_ >#1>
                                                   C AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
40 f1bx21e11r18... >#1>
                                                   C AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
#1hx21e11r16... >#1>
                                                      AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTTTG AGGCGGACAG A:GAAAGCTG
i flhx21e11rr1... >#1>
                                                       GGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
f1hx21e11r17... >#1>
                                                      GGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
## flhx21e11r17... >#1>
                                                      GGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
flhx21e11r16... >#1>
                                                       GTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
## f1hx21e11r16_ >#1>
                                                       GTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG
1 Genbank AA7... >#1>
                                                                                     A GATGGCTCTG AGGCGGACAG AGGAAAGCTG
## £1bx21e11r22... >#1>
                                                                                                  AGGCGGACAG AGGAAAGCTG
Genbank AA7... >#1>
                                                                                                               GAAAGCTG
#1 f1hx21e11r19... >#1>
                                                                                                                AAAGNTG
## £1hx21e11r19... >#1>
                                                                                                                AAAGNTG
4 Genbank AI1... >#1>
```

AGCTG

#361 ATGACCTCAC CCTCCAGCTC TCCAGTTTTC AGGTTGGAGA CATTAGATGG AGGCCAAGAA GATGGCTCTG AGGCGGACAG AGGAAAGCTG

M T S P S S S P V F R L E T L D G G Q E D G S E A D R G K L

```
Afilhxc21e11z1 #451 GATTTTTGGA GCGGGCTGNC TTCNTTGGAG TCACAGTT: C ACGGNGANGA CCGGNAATTC CCCCC
  Genbank N28... #450 GATTTTGGGA GCGGGCTGCC TCCCATGGNT
 Gembank N29... #437 GATTTTGGGA GCGGGCTGCN TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATT
 ### flhxc21e1112 #411 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGT
 #318 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 🏟 flexc21011g1 #320 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 🏟 f1hx21e11x19... #290 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 🗐 flbx21e11r19... #290 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 🎒 flexe21e11h1 #290 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
  f1hx21e11r21... #267 GATTTTGGGA GCGGG
 A: 11x421e11b1 #250 GATTTTGGGA NCGGGCTGCC TCCCATGGAG TCACAGTTCC A
 flhxc21e11i1 #250 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAC TC
 🗐 flhxc2leilbi #250 GATTTTGGGA GCGGGCTG:C TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAAA TAAGAGTCAA CCTCAACTAC
 🎜 flhxc21011b2 #250 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 Ajthsa103e2b2 #242 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 D jthsa103e2b1 #242 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 [A] jthsa103e2t2 #242 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 Ajthsa103e2t1 #241 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 Genbank AA4... #230 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATT CTCAGA TAAGAGTCAA CCTCAACTAC
 42 jthsa103e02t... #230 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATT
                                                                                          CTCAGA TAAGAGTCAA CCTCAACTAC
 Pelbx21e11r21... #215 gattttggga gegggetgee teccatggag teacagttee agggegagga eeggaaatte geeeeteaga taagagteaa eeteaaetae
 Pihx21e11r21... #196 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 A flax21011r21... #193 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 Genbank H20. #131 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATT
                                                                                         CTCAGA TAAGAGTCAA CCTCAACTAC
 Genbank H50... #130 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATT
                                                                                          CTCAGA TAAGAGTCAA CCTCAACTAC
 Genbank H49... #130 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATT
                                                                                          CTCAGA TAAGAGTCAA CCTCAACTAC
 # £1bx21e11x20... $112 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 finx21e11r20... #112 Gattttggga gcgggctgcc tcccatggag tcacagttnc agggcgagga ccggaaattc gcccctcaga taagagtcaa cctcaactac
 filmx1e11r22... #112 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 Pilx21e11r22... #112 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 filx21e11r20_ #112 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 🗐 flhx2le11xr13... #71 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAATCAA CCTTAACTAC
 flhx21e11r18v2 #67 GA: TTTGGGA GCCGGCTG
 Pflbx21e11r18v1 #67 GATTTTGGGA GCGGGCTGCC T:CCATGGAG TCACAGTTNC AGGGCGAGGA CCGGAAATTC GCCCCT
 🗐 flhx21e11r16g2 #67 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 🗐 flbx21e11r18g2 #67 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 flhx21e11r15g2 #67
                    GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
 ₽ £1bx21e11x15g1 #67 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
## flhx21e11x20e1 #67 GATTTTGGGA NCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAANAGTCAA CCTCAACTAC
🗐 flbx21e11r18a2 #67 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
Pilx21e11r17v2 #63 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
# flhx21011r17g2 863 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
# flhx21e11r17a1 #63 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
🗐 finx21011x15m1 #63 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
A filmx1e11r15a2 162 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
🛱 flhx21e11r18a1 #62 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
🛱 fihx21011r1602 #61 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
🗐 flhx2lellx13... #60 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
Pidx21e11x17v1 #60 Gattttggga gegggetgee teccatggag teacagttee agggegagga eeggaaatte geeeeteaga taagagteaa eeteaaetae
🏿 flbx31e11x17e2 #60 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
A filmiellx16g1 #59 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
🗐 flbx21611x16a1 #59 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
Genbank AA74... #32 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATT
                                                                                         CTCAGA TAAGAGTCAA CCTCAACTAC
A 11hx21e11r22g1 #21 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
√ Gembank AA768... #9 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATT CTCAGA TAAGAGTCAA CCTCAACTAC
£ flhx21e11x19a2 #8 GATTINGGAA GCGGGCTGCC TCCCATGAAG TCNCAGTTCA AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CCTCAACTAC
A finx21611x19al #8 GATTTTGGGA GCGGGCTGCC TCCCATGAAG TCACAGTTCC AGGGCGAGGA CCGGAAATTC GCCCCTCAGA TAAGAGTCAA CTTCAACTAC
Gembank All26... #6 GATTTTGGGA GCGGGCTGCC TCCCATGGAG TCACAGTTCC AGGGCGAGGA CCGGAAATT CTCAGA TAAGAGTCAA CCTCAACTAC
Dichalosews #3 Gatttingga negggetgee teccatgnag teacagttee agggegagga engnaaatte geeceteaga taagagteaa eeteaactae
```

21ella Sequencher* "21ellracefinal"

₹Ø.										
jthsa103e2x1	>#1>	TTTGGGA	GCGGNCTGCN	TCCCATGNAG	TCACAGTTCC	AGGNCGAGGA	CCGNAAATTC	GCCCNTCAGA	TAAGAGTCAC	CCTCAACTAC
flbx21e11r18	>#1>		TGCC	TCCCATGGAG	TCACAGTTCC	AGGGCGAGGA	CCGGAAATTC	GCCCCTCAGA	TAAGAGTCAA	CCTCAACTAC
f1hx21e11r21	>#1>			AG	TCACAGTTCC	AGGNCGAGGA	CCGGAAATTC	GCCCCTCAGA	TAAGAGTCAA	CCTCAACTAC
f1bx21e11r17_				AG	TCACAGTTCC	AGGGCGAGGA	CCGGAAATTC	GCCCCTCAGA	TAAGAGTCAA	CCTCAACTAC
#2 flhx21e11r22	>#1>								TAAGAGTCAA	·
flhx21e11rrl	>#1>								TARARGTCAC	
Genbank AA4	>#1>					AGGGCGAGGA			TAAGAGTCAA	
flhx21e11rrl	>#1>								TAAGAGTCAC	
flhx21e11rrl	>81>									
flhx21e11rrl									TAAGAGTCAA	
						GGC: AGG:	NCGGAAATTC	GCCCCTCAAA	TAA: AGTCAA	CCTCAACTNC
Genbank AA8	>#1>					GGA	CCGGAAATT	CTCAGA	TAAGAGTCAA	CCTCAACTAC
Genbank AA2							TC	GCCCTCAGA	TAAGAGTCAA	CCTCAACTAC
jthsa103e2w1	>#1>									TAC
							Martin des et deplement et et et fait de la			

...

:

```
flbXc21e11g2 #428
                           CGARAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTNC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
   flhxc21e11g1 #410
                           CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCNNC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
   flbx21e11r19... #380
                           CGARAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
  #380 #380
                           CGARAGGGAA CAGGTGCCAG TCAGCCGGAT CCARACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
  flhxc21e11h1 #380
                           CGARAGGGAR CAGGTGCCAG TCAGCCGGAT CCARACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
  f1hXc21e11b1 #340
                           CGARAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTNCCCGAGA TCGGCTCTTN ATTGCGGGCT CCGGGGGTGT CCCNAAGGAT
  flhxc21e11b2 #340
                           CGARAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTNTTT AATGCGGGCT CCCGGAGGAT
  12 jthsa103e2b2 #332
                           CGAAAGGGA
  i jthsa103e2b1 #332
                           CGAAAGGGA
  Application #332 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT : CCCGAGGAT
  Ajthsa103e2t1 #331 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
  Genbank AA4... #320 CGAAA: GGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTT
  4 jtheal03e02t... #320 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
  Paragonal properties and the control of the control
  🏟 flhx21e11x21... #286 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
  🛿 f1bx21e11r21... #283 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 Gembank H20... #221 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCNAGGAT
 Genbank H50... #220 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 Gembank H49... #220 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 1 f1bx21e11r20... #202 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 🏿 flbx21e11r20... #202 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 A filx21e11r22... #202 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 Pihxziellr22... #202 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 🔁 flhx21e11r20... #202 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 Pink21e11r1... #161 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCCAGA TCGGGTCTTC AATGCNGTCT CCCGGGGTGT :CCCGAGGAT
 Pidx1e11r16... #157 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGNAT
 🏟 filmxielly18... #157 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGANNAT
 finxielly15. #157 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCTGAGGAT
 Afilhx21e11r15... #157 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCTGAGGAT
 🎒 flhx21e11r20... #157 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 🎜 flhx2le11r18... #157 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 PIDX21611r17... $153 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT NCCGGGGTGT CCCCGAGGAT
 🏟 flhx2le1lr17... #153 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 la filmx1e11x17... #153 cgaaagggaa caggtgccag tcagccggat ccaaaccgat ttgaccgaga tcggctcttc aatgcggtct cccgggggtgt ccccgaggat
 flhx21e11r15... #153
                          CGARAGGGAR CAGGTGCCAG TCAGCCGGAT CCARACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCTGAGGAT
 🗐 fibxxlellr15... #152 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCTGAGGAT
 flhx21e11r18... #152
                         CGARAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
 🏿 fibx2lellr16... #151 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
filhx21e11rr1... #150 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGA: TTGACCGAGA A
🗐 flhx2lellr17... #150 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
🌠 flbx3lellr17... #150 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
🏟 fibx21e11r16... #149 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
4 flhx21e11r16... #149 CGARAGGGAA CAGGTGCCAG TCAGCCGGAT CCARACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
€ Genbank AA7... #122 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
🏟 flhx21e11r22... #111 CGAAAGGGAA CAGGTGCCAG NCAGCCGGAT CCAAACCGAT TTGACCNAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
🛱 Gembank AA76... #99 CGAAAGGGAA CAGATGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
1 11hx21011r19a2 198 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
😰 flbx31e11r19e1 #98 CGARAGGGAR CAGGTGCCAG TCAGCCGGAT CCARACCGAT TTGACCGAGA TCGGCTCTTC ARTGCGGTCT CCCGGGGTGT CCCCTAGGAT
Gendank AI12... #96 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
#93 thea103e2w2
                         CGARAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
i jthsa103e2x1 #88
                         CGARAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
flhx21e11r18g1 #75
                         CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
flbx21e11r21g1 #63
                         CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGNAT
flhx21e11r17g1 #63
                         CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCCGGGGTGT CCCCGAGGAT
f1hx21e11r22g2 #61
                         CNARAGGGAR CAGGTGCCAG TCAGCCGGAT CCARACCGAT TTGACCGAGA TCGGCTCTTC RATGCGGTCT CCCGGGGTGT CCCCGANGAT
42 flhx21011xx12... 454 CGAAA: GGAA CAGGTCCCAG TCAGCGGGAT CCAAACCGAT TNGACCGAGA TCGGNTTTTC AATCGGTTCT CCGGGGGTGT CCCCGAGGAT
4 Genbank AA46... #51 CGAAAGGGAA CAGGTGCCAG TCAGCCGGAT CCAAACCGAT TTGACCGAGA TCGGCTCTTC AATGCGGTCT CCCGGGGTGT CCCCGAGGAT
₽ fihx2lellxx13... #51 CGAAAAGGAA CAGGTCCCAG TCACCCGGNT CNAAACCGAT TTGACNGAGA TCGG:TTTC AATCGGGTCT CCNGGGGTGT CCCCGAGGAT

♠ 11hx21e11x13... 850 NGAAAGGGAA CAGGTGCCAG TCA:NCGGAT CC:AANCGAT TTGACCGAGA TCGGCTCTTC AATCGGTTCT CCGGGGGTGT CCCNGAGGAT
```

_

.ea																																
	lhX21e11rr14.	#49	CGA	AAG	GGA.	A C	AGG1	GCC	A:	TC	AAC	GGAT	CCI	AAAC	CGAT	1	TGAC	CGAG	A	T:GG	GI	TTTC	AA:	rcgg	GTC	rc	cce	ggg	тот	ccc	CGA	GGAT
	enbank AA81.	#44	CGA.	AAG	GGA	A C	AGGI	GCC	AG	TC	AGCC	GGAT	CCA	AAAC	CGAT	. 1	TGAC	CGAG	A	TCGG	C1	CTTC	AA	rgcg	GTC	rc	ec i	aac	ጥርተ	CCC	CGA	GGAT
	enbank AA23.	#33	CGA	AAG	G : A	A C	AGGT	GCC	AG	TC	AGCC	GGAT	CC	AAAC	CGAT	. 1	TGAC	CGAG	A	TCGG	CI	CTTC	AA?	rgcg	GTC	rc	CCG	3GG	тст	CCC	40.	CGAT
	hsa103e2w1	#4	NGA	AAG	GGA	A C	AGGT	GCC	AG	тC	AGCC	GGAT	CC	AAC	CGAT	. 1	TGAC	CGAG	A	TCGG	CI	CTTC	AA	rgcg	GTC'	ГС	CCG	GGG.	TGT	ccc	CGA	GGAT
1 2] £1	hX21e11rr9	>#1>	A	AAA	GGA	A C	AGGT	'GCC	AG	TC	AGCC	GGAT	CCF	AAC	CGAT	. 1	TGAC	CGAG	A	TGGG	CI	CTTC	AA	rcga	TTC	r c	CNG	300	TGT	ccc	CGA	GGAT
101	hsa103e2x2	>#1>																				сттс										
12 0	enbank AIO	>#1>																	٠						C.							GGAT
				*** *** 1				• • • •						· · · · ·			• •• · · · · · · · · · · · · · · · · ·							·								
	F	#541	CGA	AAG	GGA	A CA	GGT	GCC	AG	TC.	AGCC	GGAT	CCA	AAC	CGAT	T	TGAC	CGAG	A '	TCGG	CŦ	CTTC	AAT	GCG	GTC:	ГC	CCG	egg:	rgr	ccc	CGA	GGAT
			R	K	G	T	G	A	s	,	Q P	D	P	N	R				D	R		F		A			R			P		
			++	•	•		•	•	•	+	•+•	+	+•	+			++•	+•		• •		• + + •						Ī	•			

```
🏟 fldxc21e11g2 #518 ctggctggac ttccagagta cctgagcaag accagcaagt acctcaccga ctcggaatac acagagggnt cna
 A f1hxc21e11g1 #500 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGNT CCA
 # flhx21e11r19_ $470 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGN CTCGGAAT: C NCAGAGGG
 flhx21e11r19... #470 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGG
 filxc21e1lh1 #470 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
  flbxc21e11b1 #430 CTGNTTGGAC TT
 #430 CTGGCTGGAC TTTCAGAGTA CCTGAGCCAG ACCAGCAAGT ACCTC:CCGA CTCGGAATAC ACAGAAGGCT TCACAAGTAA AACGTGCCTG
  Bjthsa103e2t2 #422 ctogctggac ttncagagta cctgagcaag ancagcaagt
 19 jthsa103e2t1 #421 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGANGGCT NCACANGTAA GACGTGCCTG
 🗐 jthsal03e02t... #410 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 #1hx21e11r21... #395 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 PIPX21e11r21... #376 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 ### flhx21e11r21... #373 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGC
 Genbank H20... #311 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCT:ACCGA CTTGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 Genbank H50... #310 CTGGCTGGAT TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT AC
    Genbank H49... #310 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTTGGAATAC ACAGAGGGGT CCACAGGTAA GACGTGCCTG
 #292 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCNCCGA CTCGGAA
 flhx21e11r20... #292 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAAT
 #291 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 🗐 flbx2le11r22... #292 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 1 finx21e11r20... #292 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 flhx21e11rr1... #251 CTGGCTGGAC TT
 #247 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGA
 f1hx21e11x18... #247 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGA
 19 (1bx21e11r15... #247 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGA
 Pihx21e11r15... #247 ctggctggac ttccagagta cctgagcaag accagcaagt acctcaccga ctcggaatac ncagag
 🏟 flhx21e11r20.. #247 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 #2 flhx21e11r18.. #247 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 A flhx21e11r17... #243 CTGGCTGGAC TTTCAGAGTA CCTGAGCAAG ACCAGCAA
 A fibx21e11r17... #243 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGA
 #2 flmx1e11r17... #243 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 finx21e11r15... #243 ctggctggac ttccagagta cctgagcaag accagcaagt acctcaccga ctcggaatac acagagggct ccacaggtaa gacgtgcctg
 1 [15x21e11r15... #242 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 🎒 flbx2le11r18... #242 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 #261hx21e11r16... #241 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
 🗐 f1hx21e11r17... #240 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCT:NCCGA CTCGGAATAC ACAGANGGCT TCACANGTNA AACGTGCCTT
 Pihx21e11r17... #240 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
filx21e11r16... #239 ctggctggac ttccagagta cctgagcaag accagcaagt acctcaccga ctcggaatac ncnga
# flhx21e11r16... #239 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
4 Genbank AA7... #212 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
### f1hx21e11r22_ #201 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC NCAGA
Genbank AA7... #189 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
Filmx1e11r19... #188 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
fihx21e11r19_ #188 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
Genbank All... #186 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
10 jembal03e2w2 #183 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
🍎 jthṣa103e2x1 #178 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
#2 flhx21e11r18... #165 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGG
1 flhx21e11r21... #153 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAG
A filmx21e11r17... #153 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGA
filmx21e11r22... #151 ctggctggac ttccagagta cctgagcaag accagcaagt acctcnccgn ctcg
#144 CTGGCTGNAC TTCCANAGTA CCTGAGCAAG ACCAGCAAGT NCCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGCAA GACGTGCCTG
Genbank AA4... #141 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
A flmxlellyri... #141 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
filmx1e11rr1... #140 CTGGCTGNAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT NCCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
42 flhx21e11xx1... #139 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
Genbank AAS... #134 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
Genbank AA2... $123 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
1 jehbal03e2w1 894 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
```

```
A filx21e11xr9c... #89 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGCAA GACGTGCCTG
  10 jthsa103e2x2 874 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
  Genbank AI00... #23 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
   jthsa103e2a1 >#1>
                                                                                                                CTCGGAATAC ACAGAGGCT CCACAGGTAA GACGTGCCTG
  #1> jthsa103e2a2 >#1>
                                                                                                                CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
                    #631 CTGGCTGGAC TTCCAGAGTA CCTGAGCAAG ACCAGCAAGT ACCTCACCGA CTCGGAATAC ACAGAGGGCT CCACAGGTAA GACGTGCCTG
                                                  PEYLSK TSKY LTD SEY TEGS TGK TCL
                                 LAGL
  finxc21e11hl #560 AT: AAGGCTG TGCT
  flhxc21e11b2 #520 ATGAAGGCTG TGCT
  1 jthse103e2t1 #511 ATGAAGGCTG TGCTGAACCT TAAGGACNGA GTCAATGCCT GCATTNTGC
  Ajthsa103e02t... #500 ATGAAGGCTG TGCTGAACCT TAAGGACNGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTNTGGCAA TCCTNAGCCC
  flbx21e11r21... #485 ATGAAGGCTG TGCTGAAC
  fibx21e11r21_ #466 ATGAAGGCTG TGCTGAACC
  Genbank H20... #401 ATGAAGGCTG TG
  Genbank H49... #400 ATGAA
  f1hx21e11r22... #382 ATGAAGGCTG TGCTGAACC
 f1hx21e11r22... #382 ATGAAGGCTG TGCTGAACC
 f1hx21e11r20... #382 ATGAAGGCTG TGCTGAACC
 f1bx21e11r20... #337 ATGAAGGCTG TGCTGAACC
 flbx21e11r18... #337 ATGAAGGCTG AGCTGAACC
 f1bx21e11r17... #333 ATGAAGGCTG TGCTGAAC
 flhx2le11r15... #333 ATGAAGGCTG TGCTGAACC
 flbx21e11r15... #332 ATGAAGGCTG TGCTGAACC
 flbx21e11r18... #332 ATGAAGGCTG AGCTGAACC
 f1bx21e11r16... #331 ATGAAGGCTG TGCTGAAC
 f1hx21e11r17_ #330 ATGAANGCTT TGCTGAAC
 flhx2lellr17... #330 ATGAAGGCTG TGCTGAAC
 Elhx21e11r16... #329 ATGAAGGCTG TGCTGAACC
4 Genbank AA7... #302 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
     Genbank AA7... $279 ATGAAGGCTG TGCTGAACCT TAAGGACGGG GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
 #278 ATGAAGGCTG TGCTGAACCT TAAGGACGGG GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACCGGG ACTCTGGCAA TCCTCAGCCC
Afilmx1611r19... $278 ATGAAGGCTG TGCTGAACCT TAAGGACGGG GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACCGGG ACTCTGGCAA TCCTCAGCCC
4 Gembank AII... #276 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
A jthsa103e2w2 #273 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
Ajthsa103e2x1 #268 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
### flhx21e11rr1... #234 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGTC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
√② Gembank AA4... #231 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
🛱 flhx21e11xr1... #231 atgaaggetg tgetgaacet taaggaegga gteaatgeet geattetgee aetgetgeag atcgaeaggg aetetggeaa teeteageee
🛱 flhx21e11x1... #230 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCNT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
#21 PINX21e11xr1... #229 ATGAAGGCTG TGCTGAACCT TAAGGACGGG GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
√2 Gembank AA8... #224 ATGAAGGCTG TGCTGAACCT TAAGGACGGG GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
Genbank AA2... #213 ATGAAGGCTG TGCTGAACCT TAAGGACGGG GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACCGGG ACTCTGGCAA TCCTCAGCCC
A jthsa10362w1 $184 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
♠️ flbx21e11rr9.. #179 atgaaggetg tgetgaacet taaggaegga gteaatgeet geattetgte aetgetgeag ategaeaggg aetetggeaa teeteageee
1 jthsa103e2x2 #164 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
Gembank AIO... #113 ATGAAGGCTG TGCTGAACCT TAAGGACGGG GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACCGGG ACTCTGGCAA TCCTCAGCCC
I jthse103e2e1 #41 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
10 jthsa103e2a2 #41 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
AGGG ACTNTGGCAN TCNTCAGCCC
                                               Pages of these and deposition and the second of the second
```

#721 ATGAAGGCTG TGCTGAACCT TAAGGACGGA GTCAATGCCT GCATTCTGCC ACTGCTGCAG ATCGACAGGG ACTCTGGCAA TCCTCAGCCC
M K A V L N L K D G V N A C I L P L L Q I D R D S G N P Q P

Genbar filmx21 filmx21 Genbar jthsa1 Genbar filmx21 Genbar filmx21 Genbar filmx21 Genbar	oank Al0 103e2a1	#203 #131	CTGGTAAATG CTGGTAAATG	CCCAGTGCAC CCCAGTGCAC CCCAGTGCAC	AGATGA CTAT AGATGA CTAT	TACCGAGGCC TACCGAGGCC	ACAGCGCTCT ACAGCGCTCT	GCACATCGCC GCACATCGCC	ATT ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genbar Genbar	oank AIO	#203	CTGGTAAATG	CCCAGTGCAC CCCAGTGCAC	AGATGA CTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATT		
Genbar filhx21c filhx21c Genbar filhx21c Genbar			CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genbar	107-0										
Genba filmx21			CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGTC	ATTGAGAAGA	GGAGTCTGCA	GTGTGCGAAG
Genbar flhx21 Genbar glithsa1 Genbar Genbar Genbar Genbar Genbar Genbar Genbar Genbar Genbar			CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genbar filmx21 filmx21 Genbar jthsa1 Genbar filmx21 Genbar filmx21 Genbar filmx21 Genbar	bank AA2		CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genba filhx21 filhx21 Genba jthsa1 filhx21 Genba filhx21 filhx21 filhx21 filhx21 filhx21	bank AA8		CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATT		o.o.o.dand
Genbar filhx21.			CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genbar filhx21 Genbar jthsa1 Genbar filhx21 Genbar filhx21 Genbar filhx21 Genbar filhx21 Genbar filhx21			CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TNCCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genba flhx21 flhx21 flhx21 fl Genba jthsa1 flhx21 flhx21 flhx21 flegenba				CCCAGTGCAC						GGAGTCTGCA	GNGTGTNAAG
Genba flhx21 flhx21 Genba jthsa1 flhx31 flhx31 flhx31	bank AA4		CTGGTAA ATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATT	CONGICIOCA	GIGTGCGAAG
Genba ### Genba ####################################	21e11rr1	#324	CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGTC	ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genba flhx21 Genba Genba			CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genba flhx21 flhx21 Genba	a103e2w2	#363	CTGGTAA ATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genba	bank AI1		CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATTGAGAAGA	GGAGTCTGCA	GTGTGTGAAG
Genba	21e11r19	#368	CTGGTAAATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGCC	ACAGCGCTCT	GCACATCGCC	ATTORONAGA	GGAGTCTGCA	GTGTGTGAAG
(Genba				CCCAGTGCAC						GGNOWGWGGN	00000000000000000000000000000000000000
	bank AA7			CCCAGTGCAC							
Genba	bank AA7	#392		CCCAGTGCAC				GCACATCGCC	እ ጥ ጥ		
4 ∅jthsa1	a103e02t	#590	CTGGTAA ATG	CCCAGTGCAC	AGATGACTAT	TACCGAGGNC	ACAGCGC				

#811 CTGGTAAATG CCCAGTGCAC AGATGACTAT TACCGAGGCC ACAGCGCTCT GCACATCGCC ATTGAGAAGA GGAGTCTGCA GTGTGTGAAG L V N A Q C T D D Y Y R G H S A L H I A I E K R S L Q C V K

21e11a "21e11racefinal" Sequencher**

```
### flbx21e11r19... #458 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGGCCGC
#21bx21e11r19... #458 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGGCCGC
Genbank All... #456 CTCCTGGTGG AGAATGGGGC CAATG
1 ithma103e2w2 #453 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGGCCGCT
Djthsal03e2x1 #448 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGGCCGCT
♣ flhx2le11rrl. #414 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGACCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
🗐 flhx21e11x1... #411 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGCCGCTT NTTCCAGAAG GGCCAAGGGN CTTGCTTTTA TTTNGGTNAG
√🗐 flbx21e11xx1... #409 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGGCCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
Genbank AA2... #393 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT G
12 jthma103e2w1 #364 CTCCTGGTGG AGANTGGGGC CANTGTGNAT GCCCGGGCCT GCGGCCGCT
42 flhx21e11rrg.. #359 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGACCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTA TTTCGGTGAG
10 jthma103e2x2 #344 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGGCCGCT
#221 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGGCCGCT
### jthsa103e2a2 #221 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGGCCGCT
√ flbx2le11xx1... #115 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGGCCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
1 frhob12c4g1... >#1>
                                                             GCGGCCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
frhob012c04s... >#1>
                                                             GCGGCCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
frhob012c04s... >#1>
                                                             GCGGCCGCTT CTTCCAGAAG GGCC:AGGGA CTTGCTTTTA TTTCGGTGAG
flhX21e11rha2 >#1>
                                                              CGGCCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
flhx21e11xmv2 >#1>
                                                                GCCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
#1 f1hX21e11rlv1 >#1>
                                                                 CCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
frhoc12c4h3... >#1>
                                                                     TT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGG:NAG
12 flhx21e11rlv2 >#1>
                                                                         TTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
1 f1hx21e11rmv1 >#1>
                                                                             AGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG
#2 f1hx21e11rja2 >#1>
                                                                                       AGGGA CTTGCTTTTA TTTCGGTGAG
√ Genbank AA9... >#1>
                                                                                                          TCGGTGAG
√2 Genbank AA9... >#1>
                                                                                                          TCGGTGAG
```

#901 CTCCTGGTGG AGAATGGGGC CAATGTGCAT GCCCGGGCCT GCGCCGCTT CTTCCAGAAG GGCCAAGGGA CTTGCTTTTA TTTCGGTGAG L L V E N G A N V H A R A C G R F P Q K G Q G T C F Y F G E

```
4 flbx21e11rr1... #504 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
₽ FINX21e11rrl... $501 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCNCCAG CCTGCAGGCC
₽ fibx21e11rrl... $500 CTACCCCTCT CNTTGGCCGC TTGCACCAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCGGCCAG CCTGCAGGCC
42 flhx21e11rrl... 1499 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC GGCCCGCCAG CCTGCAGGCC
4 flhx21e11rr9... #449 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
## flhx21e11rr1... #205 CTACCCCTCT CTTTGNCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC GGCCCGCCAG CCTGCAGGCC
4₽ frhobl2c4gl.a.. #51 CNACCCCTCT CTTTGNCCGC TTGCACCAAG CAGTGGNATG TGGTAAGCTA CCTCCTGGAG AACCCACNCC AGCCCGCCAG CCTGCAGGCC
₹ frhob012c04s1... #51 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
₽ frhobol2c04sl... #51 CTACCCCTCT CTTINGCCGC TIGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
### flhx21e11rha2 #50 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
Pflhx21e11rmv2 #48 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
### flhx21e11rlv1 #47 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
₹ frhoc12c4h3.a... #43 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCT:GAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
#36 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
#26 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
4 Gembank AA992... #9 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
🛱 Gendank AA995... #9 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
### CCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
                      CCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
flhx21e11rr9... >#1>
                              CTTTGGCCGC TTGCNCCAAG CAGNGGGATG TGGTAAGCTA CCTNCTGGAG AACCCACACC AGNCCGCCAG CCTGCAGGCC
| jthKb051a01t... >#1>
                                                                     TA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
4 flhx21e11rrl... >#1>
                                                                      TA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
4 flhx21el1rrl.. >#1>
              #991 CTACCCCTCT CTTTGGCCGC TTGCACCAAG CAGTGGGATG TGGTAAGCTA CCTCCTGGAG AACCCACACC AGCCCGCCAG CCTGCAGGCC
                    L P L S L A A C T K Q W D V V S Y L L E N P H Q P A S L Q A
                               + ++
flhx21e11rrl... #594 ACTGACTCCC AGGGCAACAC AGTC
1 flbx21e11rr1... #591 ACTGACTCCC AGGGCAACAC NGT
flbx21e11rrl... #590 ACTGACTCCC AGGGCAACAC AGT
4 flbx21e11rrl... #589 ACTGACTCCC AGGGCAACAC AGTCC
# flhx21e11rr9... #539 ACTGACTCCC AGGGCAACAC AGTC
### flhx21ellrr1... #295 ACTGACTCCC AGGGCAACAC AGTC
4₽ frhobl2c4g1... $141 ANTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATGTCGGN CAANTCAGCT GAGAACATTG CACTGGTGAC CAGCATGTAT
√ frhob012c04s... $141 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACATTG CACTGGTGAC CAGCATGTAT
√ frhob012c048... $141 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACATTG CACTGGTGAC CAGCATGTAT
A filmx1e11me2 e140 actgactece agggeaacae agteetgeat geectagtga tgatetegga caacteaget gagaaca
🎾 fibx21e11zmv2 #138 actgactece agggeaacae agtectgeat gecetagtga tgatetegga caacteaget gagaaca
Pidazielirivi $137 actgactece agggearcae agtectgeat gecetagtga tgatetegga caacteaget gagaaca
4 frincel 2 c4h3 ... #133 ACTGACTOCO AGGGCAACAC AGTOCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACATTG CACTGGTGAC CAGCATGTAT
Pfinx21e11r1v2 #130 ACTGACTOCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACA
10 flbx21e11rmv1 #126 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATGTCGGA CAACTCAGCT GAGAAC
🎾 fibx21e11rja2 #116 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACA
4 Gembank AA99... ∰99 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACATTG CACTGGTGAC CAGCATGTAT
Gendank AA99... #99 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACATTG CACTGGTGAC CAGCATGTAT
₽ flbx21e11rr9a1 688 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACA
₽ finx1e11r79a2 $88 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACA
□ jthxb051a01t1... #81 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAA
4 flhx21e11rr11... #43 ACTGACTCCC AGGGCAACAC AGTC
flhx21el1rr11... #43 ACTGACTCCC AGGGCAACAC AGTN
```

#1081 ACTGACTCCC AGGGCAACAC AGTCCTGCAT GCCCTAGTGA TGATCTCGGA CAACTCAGCT GAGAACATTG CACTGGTGAC CAGCATGTAT

T D S Q G N T V L H A L V M I S D N S A E N I A L V T S M Y

```
🗗 frhobl2c4g1... #231 GATGGGCTCC TCCAAGCTGG GGCCCGCCTC TGCCCTACCG TGCAGCTTGA GGACATCCGC AACCTNCAGG ATCTCACGCC TCTGAAGCTG
₡₡₡ frhob012c04s... ¶231 GATGGGCTCC TCCAAGCTGG GGCCCGCCTC TGCCCTACCG TGCAGCTTGA GGACATCCGC AACCTGCAGG ATCTCACGCC TCTGAAGCTG
🕰 frindb012c04s... #231 GATGGGCTCC TCCAAGCTGG GGCCCGCCTC TGCCCTACCG TGCAGCTTGA GGACATCCGC AACCTGCAGG ATCTCACGCC TCTGAAGCTG
🖆 frhoc12c4h3... #223 GATGGGCTCC TCCAAGCTGG GGCCCGCCTC TGCCCTACCG TGCAGCTTGA GGACATCCGC AACCTGCAGG ATCTCACGCC TCTGAAGCTG
🞜 Gendank AA9... #189 GATGGGCTCC TCCAAGCTGG GGCCCGCCTC TGCCCTACCG TGCAGCTTGA GGACATCCGC AACCTGCAGG ATCTCACG
🛱 Genbank AA9... #189 - GATGGGCTCC TCCAAGCTGG GGCCCGCCTC TGCCCTACCG TGCAGCTTGA GGACATCCGC AACCTGCAGG ATCTCACGCC TCTGAAGCTG
jthLa029c10t... >#1>
                                             CGCCTC TGCCCTACCG TGCAGCTTGA GGACATCCGC AACCTGCAGG ATCTCACGCC TCTGAAGCTG
1 Genbank ₩38... >#1>
                                               CCTC TGCCCTACCG TGCAGCTTGA GGACATCCGC AACCTGCAGG ATCTCACGCC TCTGAAANTG
             #1171 GATGGGCTCC TCCAAGCTGG GGCCCGCCTC TGCCCTACCG TGCAGCTTGA GGACATCCGC AACCTGCAGG ATCTCACGCC TCTGAAGCTG
                    D G L L Q A G A R L C P T V Q L E D I R N L Q D L T P L K L
4☐ frhob12c4g1... #321 GCCGCCAAGG AGGGCAAGNT CGANATTTTC AGGCACATCC TGCA
🜓 frhob012c04s... #321 GCCGCCAAGG AGGGCAAGAT CGAGATTTTC AGGCACATCC TGCAGCGGGA GTTTTCAGGA CTGAGCCACC TTTCCCGAAA GTTCACCGAG
🜓 frhob012c04s... #321 GCCGCCAAGG AGGGCAAGAT CGAGATTTTC AGGCACATCC TGCAGCGGGA GTTTTCAGGA CTGAGCCACC TTTCCCGAAA GTTCACCGAG
🛱 fithoc12c4h3.... #313 GCCGCCAAGG AGGGCAAGAT CGAGATTTTC AGGCACATCC TGCAGCGGGA GTTTTCAGGA CTGAGCCACC TTTCCCGAAA GTTCACCGAG
Genbank AA9... #279 GCCGCCAAGG AGGGCAAGAT CGAGATCTTC AGGCACATCC T
4 jihla02961011... 867 GCCGCCAAGG AGGGCAAGAT CGAGATTTTC AGGCACATCC TGCAGCGGGA GTTTTCAGGA CTGAGCCACC TTTCCCGAAA GTTCACCGAG
🛍 Gembank W386... #65 GCCGCCAAGG AGGGCAAGAT CGAGATTTTC AGGCACATCC TGCAGCGGGA GTTNTCAGGA CTGAGCCACC TTTCCCGAAA GTTCACCGAG
√ Genbank AA3... >#1>
                                                                           TTCAGGA CTGAGCCACC TTTCCCGAAA GTTCACCGAG
             #1261 GCCGCCAAGG AGGGCAAGAT CGAGATTTTC AGGCACATCC TGCAGCGGGA GTTTTCAGGA CTGAGCCACC TTTCCCGAAA GTTCACCGAG
                    AAKE GKI EIFRHIL QRE FSG LSHL SRK FT E
🔎 frhob012c04s... #411 TGGTGCTATG GGCCTGTCCG GGTGTCGCTG TATGACCTGG CTTCTGTGGA CAGCTGTGAG GAGAACTCAG TGCTGGAGAT CATTGCCTTT
√ fimbb012c04s... $411 TGGTGCTATG GGCCTGTCCG GGTGTCGCTG TATGACCT;G CTTCTGTGGA CAGCTGTGAG GAGAACTCAA TGCTGGAGAT CATTGCCTTT
₡∰ frhoc12c4h3... #403 TGGTGCTATG GGCCTGTCCG GGTGTCGCTG TATGACCTGG CTTCTGTGGA CAGCTGTGAG GAGAACTCAG TGCTGGAGAT CATTGCCTTT
₡∰}thla029c10t... #157 TGGTGCTATG GGCCTGTCCG GGTGTCGCTG TATGACCTGG CTTCTGTGGA CAGCTGTGAG GAGAACTCAG TGCTGGAGAT CATTGCCTTT
🛱 Genbank W38... #155 - TGGTGCTATG GGCCTGTCCG GGTGTCGCTG TATGACCTGG CTTCTGTGGA CAGCTGTGAG GAGAACTCAG TGCTGGAGAT CATTGCCTTT
🗲 Gendank AA35... #38 - TGGTGCTATG GGCCTGTCCG GGTGTCGCTG TATGACCTGG CTTCTNTGGA CAGCTGTNAG GAGAACTCAG TGCTGGAGAT CATTGCCTTT
frhob12c4c1.... >#1>
                              GGCCTGTNCG GGTGTCNCTG TATGACNTGG CTTCTGTGNA CAGCTGTGAN GAGAACTCAG TGCTGGAGAT CATTGCCTTT
¶ Genbank №24... >#1>
                                                                                    GAGAACTCAG TGCTGGAGAT CATTGNCTTT
             #1351 TGGTGCTATG GGCCTGTCCG GGTGTCGCTG TATGACCTGG CTTCTGTGGA CAGCTGTGAG GAGAACTCAG TGCTGGAGAT CATTGCCTTT
                    W C Y G P V R V S L Y D L A S V D S C E E N S V L E I I A P
√ frhob012c04s... ∜501 CATTGCAAGA GCCCGCACCG ACACCGAATG GTCGNTTTGG AGCCCCTGAA CAAACTGCTG C
🗗 frhod012c04s... #501 CATTGCAAGA ACCCGCACCG ACACCGAATG GTCGNTTTGG AGCCCCTGAA CAAACTGCTG CANGCGAAAT GGGATCTGCT CAT:CCCAAG
🕰 friboc12c4h3... #493 Cattgcaaga gcccgcaccg acaccgaatg gtcgttttgn agcccctgaa caaactgctg caggcgaaat gggatctgct catccccaag
4 jtbla029c10t... $247 Cattgcaaga gcccgnaccg acaccgaatg gtcgttttgg agcccctgaa caaactgctg cangcgaaat gggatctgct catnoncaag
🕰 Gembank W38... $245 CATTGCAAGA GCCCGCACCG ACACCGAATG GTCGTTTTGG AGCCCCTGAA CAAACTGCTG CAGGCGAAAT GGGATCTGCT CATCCCCAAG
√ Gendank AA3... #128 CATTGCAAGA GCCCGCACCG ACACCGAATG GTCGTTTTGG AGCCCCTGAA CAAACTGCTG CAGGCGAAAT GGGATCTGCT CATCCCCAAG
4🗐 filiabl2c4cl.a... #81 Cattgcaaga gnccgcaccg acacngaatg gtcgttttgg agcccctgaa caaactgctg cagncgaaat gggatctgct catccccaag
🜓 Gembank N242... #31 CATTGCAAGA GCCCGNACCG ACACCGAATG GTCGTTTTGG AGCCCCTGAA CAAACTGCTG CAGGCGAAAT GGGATCTGCT CATCCCCAAG
             #1441 CATTGCAAGA GCCCGCACCG ACACCGAATG GTCGTTTTGG AGCCCCTGAA CAAACTGCTG CAGGCGAAAT GGGATCTGCT CATCCCCAAG
                    H C K S P H R H R M V V L E P L N K L L
                                                                                     Q A K W D L L I P K
```

```
frhob012c04s... #591 TTCTTCTTAA ACTTCCTG
frhoc12c4h3... #583 TTCTTCTTAA ACTTCCTG
# jthLa029c10t. #337 TTCTTNTTAA ACTTC
4 Genbank W38... #335 TTCTTCTTAA ACTTCCTGTG TAATCTGATC TACATGTTCA TCTTCA
■ Genbank AA3.. #218 TTCTTCTTAA ACTTCCTGTG TAATCTGATC TACATGTTCA TCTTCAACGC TGTTGCCTAC CATCAGCCTA CCCTGAAGAA G
4 frhob12c4c1... $171 TTCTTCTTAA ACTTCCTGTG TAATCTGATN TACATGTTCA TCTTCACCGC TGTTGCCTAC CATCAGCCTA CCCTGAAGAA GCAGGCCGCC
🛱 Genbank N24... #121 TTCTTCTTAA ACTTCCTGTG TAATCTGATN TACATGTTCA TCTTCACCGC TGTTGCCTAC CATCAGCCTA CCCTGAAGAA GCAGGCCGCC
1 flhx21eliaal... >#1>
                         TTAN ACTTCCTGTG TANTCTGATN TACATGTTCA TCTTCACCGC TGTTGCCTAC CATCAGCCTA CCCTGAAGAA GCAGGCCGCC
frhob12c4e1.... >#1>
                         TTAA ACTTCCTGTG TAATCTGATC TACATGTTCA TCTTCACCGC TGTTGCCTAC CATCAGCCTA CCCTGAAGAA GCAGGCCGCC
1 johb003T24ia... >#1>
                                                                      GC TGTTGCCTAC CATCAGCCTA CCCTGAAGAA G:::GCCGCC
√ johb003T24ia... >#1>
                                                                      GC TGTTGCCTAC CATCAGCCTA CCCTGAAGAA G:::GCCGCC
             #1531 TTCTTCTTAA ACTTCCTGTG TAATCTGATC TACATGTTCA TCTTCACCGC TGTTGCCTAC CATCAGCCTA CCCTGAAGAA GCAGGCCGCC
                    P F L N F L C N L I Y M F I F T A V A Y H Q P T L K K Q A A
4 frhobl2c4c1... #261 CCTCACCTGA AAGCGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGG TNTACCTCCT CGTGGGCCAG
€ Genbank N24... #211 CCTCACCTGA AAGCGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGA TCTACCTCCT CGTGGG
€ flhx2lellael.... #85 CCTCACCTGA AAGCGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGGA TNTACCTCCT CGTGGGCCAG
d frhob12c4e1.a... #85 CCTCACCTGA AAGCGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGGA TCTACCTCCT CGTGGGCCAG
🜓 johb003T24ia0... #43 | CCTCACCTGA AAGCGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGA TCTACCTCCT CGTGGGCCAG
4 dondoo3t24ia0... #43 cctcacctga aagcggaggt tegaaactcc atgctgctga cgggccacat ccttatcctg ctagggggga tctacctcct cgtgggccag
f1hX21e11ev2... >#1>
                     TCACCTGA AAGCGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGA TCTACCTNCT CGTGGGCCAG
flhx21e11ea2... >#1>
                     TCACCTGA AAGCGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGA TMTACCTCCT CGTGGGCCAG
flhx21e11ea1... >#1>
                     TCACCTGA AAGCGNAGGT TGGAAACTCC ANGCTGNTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGGA TMTACCTCCT CGTGGNCCAG
flhx21e11dv1... >#1>
                     TCACCTGA AAGCGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGA TCTACCTCCT CGTGGGCCAG
flhx21e11da1... >#1>
                     TCACCTGA AAGNGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGA TNTACCTCCT CGTGGGCCAG
                    #1621 CCTCACCTGA AAGCGGAGGT TGGAAACTCC ATGCTGCTGA CGGGCCACAT CCTTATCCTG CTAGGGGGGA TCTACCTCCT CGTGGGCCAG
                    PHLK AEV GNS MLLT GHILILL GGI YLL V G O
4 fxhobl2c4c1... #351 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTTT GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
4 flhx21e11aal... #175 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATNT CGTTCATAGA CAGCTACTNN GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
◆ frimbl2c4e1... #175 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTTT GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
42 johb003T24ia.. #133 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTTT GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
Djohb003T24ia... $133 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTTT GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
🗗 flhx21e11ev2.... #89 CTGTGGTACT TCTGGCGGNG CCACNTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTTT GAAATCCTCN TCCTGTTNCA NGCCCTGCTC
# flhx21e11ea2... #89 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTTT GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
4 flhx21e11ea1... #89 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTTT GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
■☐ flhx2le11dv1... #89 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTTT GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
4☐ flhx21e11da1... #89 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTT GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
             #1711 CTGTGGTACT TCTGGCGGCG CCACGTGTTC ATCTGGATCT CGTTCATAGA CAGCTACTTT GAAATCCTCT TCCTGTTCCA GGCCCTGCTC
                    L W Y P W R R H V P I W I S P I D S Y P E I L P L P Q A L L
```

Achrb21e11 #425 frhob12c4d1 >#1>	GGCACTAAGC CAGATGGCAG CCCGGATGAG CGCTGGTGCT TCAGGGTGGA GGAGGTGAAC TGGGCTTCAT GGGAGCAGAC GCTGCCTACG TCAT GGGAGCAGAC GCTGCCTACG
#2431	GGCACTAAGC CAGATGGCAG CCCGGATGAG CGCTGGTGCT TCAGGGTGGA GGAGGTGAAC TGGGCTTCAT GGGAGCAGAC GCTGCCTACG G T K P D G S P D E R W C F R V E E V N W A S W E Q T L P T
Achrb21ell #515	CTGTGTGAGG ACCCGTCAGG GGCAGGTGTC CCTCGAACTC TCGAGAACCC TGTCCTGGCT TCCCCTCCCA AGGAGGATGA GGATGGTGCC CTGTGTGAGG ACCCGTCAGG GGCAGGTGTC CCTCGAACTC TCGAGNACCC TGTCCTGGCT TCCCCTCCCA AGGAGGATGA GGATGGTGCC
#2521	CTGTGTGAGG ACCCGTCAGG GGCAGGTGTC CCTCGAACTC TCGAGAACCC TGTCCTGGCT TCCCCTCCCA AGGAGGATGA GGATGGTGCC L C E D P S G A G V P R T L E N P V L A S P P K E D E D .G A +
Achrb21e11 #605	TCTGAGGAAA ACTATGTGCC CGTCCAGCTC CTCCAGTCCA ACTGATGCCC CAGATGCAGC AGGAGGCCAG AGGACAGAGC AGAGGATCTT TCTGAGGAAA ACTATGTGCC CGTCCAGCTC CTCCAGTCCA ACTGATGCCC CAGATGCAGC AGGAGGCCAG AGGACAGAGC ANAGGATCTT
#2611	TCTGAGGAAA ACTATGTGCC CGTCCAGCTC CTCCAGTCCA ACTGATGGCC CAGATGCAGC AGGAGGCCAG AGGACAGAGC AGAGGATCTT S E E N Y V P V Q L L Q S N . W P R C S R R P E D R A E D L $+$
Achrb21el1 #695 frhob12c4d1 #205	TCCAACCACA TCTGCTGGCT CTGGGGTCCC AGTGAATTCT GGTGGCAAAT ATATATTTTC ACTAACTCAA AAAAAAAAAA
#2701	TCCAACCACA TCTGCTGGCT CTGGGGTCCC AGTGAATTCT GGTGGCAAAT ATATATTTTC ACTAACTCAA AAAAAAAAAA
	AAAAAAAAA AAAAAAAA

BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE UNITED STATE PATENT AND TRADEMARK OFFICE

LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)

Maria C. Laccotripe Zacharakis is hereby given limited recognition under 37 CFR §10.9(b) as an employee of Lahive & Cockfield, LLP, to prepare and prosecute patent applications where the patent applicant is the client of Lahive & Cockfield, LLP, and the attorney or agent of record in the applications is a registered practitioner who is a member of the Lahive & Cockfield, LLP. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Maria C. Laccotripe Zacharakis ceases to lawfully reside in the United States, (ii) Maria C. Laccotripe Zacharakis ceases to remain or reside in the United States on an H-1 visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Expires: August 5, 2003

Iarry I. Moatz

Director of Enrollment and Discipline